COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

.

In the Matter of:

IN THE MATTER OF THE APPLICATION)
OF THE MCCREARY COUNTY WATER)
DISTRICT: FOR (1) A CERTIFICATE)
OF PUBLIC CONVENIENCE AND)
NECESSITY TO EXTEND ITS WATER) CASE NO. 9415
LINES AND SERVICES; (2) AUTHORITY)
TO BORROW \$750,000 FROM FARMERS)
HOME ADMINISTRATION; AND (3))
INCREASE IN GENERAL WATER RATES.)

ORDER

IT IS ORDERED that McCreary County Water District ("McCreary"), shall file an original and 10 copies of the following information with the Commission with a copy to all parties of record within 2 weeks of the date of this Order. If neither the requested information nor a motion for extension is filed by the stated date, the Commission may dismiss the case without prejudice. The Commission would welcome the opportunity to meet informally, at McCreary's request, for discussions concerning this proceeding.

- 1. Please provide a final copy, if available, of the engineering report.
- 2. Please provide letters of confirmation for all methods of proposed financing including the Community Development Block Grant, FmHA loan or grant, ARC grant and Corps of Engineers grant.

- 3. Please provide the latest figures available for the cost of said project and amounts to be financed by each method of financing, including contributions by new customers.
- 4. Please provide an updated schedule of any proposed increase in rates and the corresponding changes to rate design.
- 5. Exhibits F and G show differences in various expense account balances. On Exhibit G an explanation is provided for adjustments made in 1984. Please provide a more detailed explanation of these adjustments and the differences between Exhibits F and G.
- 6. Please explain the substantial increase in test period expenses in Account #641, Operation Supplies and Expense, for transmission and distribution.
- 7. Please provide a detailed explanation of the substantial increase in Administrative and General Expenses, specifically Accounts 921, 924, and 935.
- 8. Provide the approximate sea level elevation of the monitoring point for the high service pump.
- 9. Provide the approximate sea level elevation of the monitoring point of the fire hydrant in Revelo.
- 10. The pressure recorder near the Parker's Lake tank and the proposed line extension in the northern portion apparently did not work. Provide a pressure recording chart showing the actual 24-hour continuously measured pressure available in this area. Identify the 24-hour period recorded, the exact location of the pressure recorder and the sea level elevation of the recorder.

- 11. Provide an explanation as to why arbitrary tank levels were chosen as starting points in the hydraulic analyses when actual field measurements were available.
- 12. Information filed in this case indicates that the King Cemetery Road tank stays essentially full and is in use on the southern portion of the system. However, information available to the Commission from previous cases, inspections, etc., indicate that this tank has been isolated from the system due to its previous history of overflowing. Provide documentation as to the current operation of the King Cemetery Road tank. Documentation should include field measurements and hydraulic calculations.
- 13. The computer hydraulic analyses of the existing system indicate that the high service pump runs approximately 20 hours out of 24 hours per day with fairly stable operation. However, the flow chart for the high service pumps indicates continuous operation and the pressure chart at the high service pump indicates erratic operation. Provide an explanation of these discrepancies documented by field measurements and hydraulic calculations.
- 14. Provide an explanation as to why the high service pump is controlled by Node 62 instead of Node 27 in the computer hydraulic analyses of the existing system.
- 15. Explain how the Hazen-Williams "C" factors which were used in the computer hydraulic analyses were determined. If flow tests were conducted, provide the flow test data.

- depicts pressure lower than 30 psig at Node 62 and pressure higher than 150 psig at Node 41. In order to document whether low and high pressures actually exist at these locations, provide pressure recording charts showing the actual 24-hour continuously measured pressure available at each of these nodes. Identify the 24-hour periods recorded, the exact location of the pressure recorders and the sea level elevation of the recorders.
- 17. The computer hydraulic analyses of the proposed system also indicates pressure lower than 30 psig will still be experienced at Node 62 and pressure higher than 150 psig will still be experienced at Node 41. Pressures of this magnitude are in violation of 807 KAR 5:066, Section 6(1). Provide details of any preventive measures or additional construction McCreary County intends to perform to protect against this type of occurrence. Details should be documented by hydraulic analyses and field measurements.
- 18. Provide an explanation as to why the maximum elevation of the Parker's Lake tank is listed at 1535 feet A.S.L. instead of 1529 feet A.S.L. in the computer hydraulic analyses for the proposed system. In addition, the analyses also indicate that the Parker's Lake tank can "backfeed" around the pump station. Provide clarification on this matter.
- 19. The computer hydraulic analyses for the proposed system filed in this case depict the high service pumps operating 16 hours per day and the Parker's Lake pump operating 22 hours per

- day. Since extended pumping times such as these are not desirable in a rural water distribution system state what preventive measures or additional construction McCreary County intends to perform to address this problem. Details should be documented by hydraulic analyses and field measurements.
- 20. It appears that after completion of the proposed construction the demand on the northern portion will significantly increase. Based on this provide a detailed explanation of why a pump capable of supplying more water to the Parker's Lake tank, and thus speeding the tank recovery, was not proposed.
- 21. The pressure chart for the Parker's Lake pump indicates unstable operation. The computer hydraulic analyses for the proposed system indicate that at times this same pump is "operating out of range." Provide details of any testing done to determine the operating characteristics of this pump. Also provide details of how this pump is expected to operate upon completion of the proposed project. Details should be supported by field measurements and hydraulic calculations. If testing was not performed on this pump, state why not.
- 22. It appears from the computer hydraulic analyses for the proposed system filed in this case that the Parker's Lake tank, Pine Knot tanks and King Cemetery Road tank do not recover in a 24-hour period. Provide information as to the expected recovery of these tanks. This information should be documented by field measurements and hydraulic calculations.

- 23. Provide a narrative description of the proposed daily operational sequences of the water system. Documentation should include the methods and mechanisms proposed to provide positive control of the existing and proposed tanks' water level. The narrative description should also include how all tanks will "work" (expected inflow and outflow of water and approximate times of day) and how any pumps will function. Any assumptions are to be fully supported by appropriate measurements and hydraulic calculations.
- 24. How many customers will be served by the proposed extension?
- 25. How did you arrive at the number of gallons the new customers would use as shown on the billing analysis (Exhibit H) proposed system?
- 26. Is the revenue received from the surcharge of 53 cents per bill shown on the income statement as water sales?
- 27. Do you know approximately how much longer McCreary will need to charge the surcharge in order to collect the \$56,415 allowed in Case No. 8720?
- 28. The total revenue from water sales shown on the printout filed with the application for the 12-month period ending July 1983 is \$536,562. The income statement shows operating revenue from water sales as \$578,625. Please reconcile the difference of \$42,063.

29. Are all current special charges and connection fees compensatory? If not, please explain why you do not propose to increase these charges at this time, or provide cost justification to do so using the attached forms.

Done at Frankfort, Kentucky, this 26th day of November, 1985.

PUBLIC SERVICE COMMISSION

Chairman

Vice Chairman

commissioner Williams

ATTEST:

Name of Utility

Special Charge Cost Schedule	
Name of Special Charge:	
I. Field Expense	
A. Materials (Itemize)	
	\$
	
B. Labor (Time and Wage Rate)	
Subtotal Field Expense	\$
II. Clerical and Office Expense	
A. Supplies	
B. Labor (Time and Wage Rate)	
Subtotal Clerical and Office Expense	\$
III. Miscellaneous Expense	
A. Transportation (Average Mileage and Mileage Rate)	
B. Other (Itemize)	
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Subtotal Miscellaneous Expense	\$
Total Special Charge Expense	\$

COMMONWEALTH OF KENTUCKY PUBLIC SERVICE COMMISSION P.O. BOX 615 FRANKFORT, KENTUCKY 40602

Average Metered Service Connection Expense

Name	of	Utility:	Addre	3S <u>:</u>		
		lowing is an itemization of	of expense	es for	providing a m	etered
serv	rice	connection.				
Α.		er Size -Inch // 3/4-Inch //	l-Inch /	1	1/2-Inch/	2-Inch
Othe	er (:	specify)				
В.	Mate	erials Expense				
			Quanity	Unit Cost		
	1.	Water Meter		<u>\$</u>	\$	
	2.	Meter Yoke				
	3.	Corporation Stop				
	4.	Meter Box and Top				
	5 .	Miscellaneous Fittings				
		(Itemize)				
	6.	Subtotal (Add column 3)				/s /

c.	Ser	vice Pipe Expense					
		e of Service Pipe:	Size of Service Pig			oe	
		• -	Quanity	 Unit	;	Total Cost	
	1.	Short Side Service	L,	F. S		•	
	2.	Long Side Service	L,	F	L.F		
	3.	Subtotal (Add column 3 and divide by 2)					/ <u>s</u>
D.	Ins	tallation Expense					
	Lab	or					
			Total Hours	Rate F Hour		Total Cost	
	1.	Short Side Service		\$		\$	
	2.	Long Side Service					-
	3.	Subtotal (Add column 3 and divide by 2)					<u>s</u>
	Equ	ipment					
			Total Hours	Rate F Hour		Total Cost	
	1.	Short Side Service		\$		<u>s</u>	
	2.	Long Side Service					
	3.	Subtotal (Add column 3 and divide by 2)					<u>/s</u> /
	Mis	cellaneous					
			Total	Rate F Hour		Total Cost	
	1.	Inspection					-
	2.	Site Clean-Up		 			-
	3.	Other (Itemize)			<u>_</u>		- ,
	4.	Subtotal (Add column 3)					/s /

E.	Ove:	rhead Expense	
	1.	Installation expense (\$) x	,
		overhead rate (<u>/\$</u>
F.	<u>Adm</u> :	inistrative Expense	
	1.	Office expense for establishing a new account	,
		and billing record.	<u>/s</u> /
G.	Exp	ense Summary	,
	1.	Total of items B-F	/\$/

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